

PTO/SB/21 (modified)  
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Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

0001/PTO Rev 10/95		U.S. Department of Commerce Patent and Trademark Office		Application Number	09/848,823
<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence during pendency of filed application)</i>				Filing Date	April 30, 2001
				First Named Inventor	Ted E. Dunning
				Group Art Unit Number	2165
				Examiner Name	Yandeja Retta
Total Number of Pages in This Submission		15	Attorney Docket Number		22227-04647

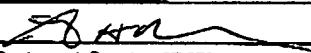
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### ENCLOSURES (check all that apply)

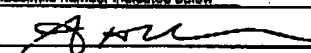
<input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate) <input type="checkbox"/> Check Enclosed <input type="checkbox"/> Return Receipt Postcard <input type="checkbox"/> Response to Notice to File Missing Parts <input type="checkbox"/> Assignment & Recordation Cover Sheet <input type="checkbox"/> Declaration <input type="checkbox"/> Power of Attorney <input type="checkbox"/> Application Data Sheet <input type="checkbox"/> Information Disclosure Statement & PTO-1449 <input type="checkbox"/> Copies of IDS Cited References <input type="checkbox"/> Request for Corrected Filing Receipt <input type="checkbox"/> Request for Correction of Recorded Assignment <input type="checkbox"/> Amendment/Response. [ ] Page(s) <input type="checkbox"/> After Final <input type="checkbox"/> Status Request <input type="checkbox"/> Revocation and Substitute Power of Attorney	<input type="checkbox"/> Issue Fee Transmittal <input type="checkbox"/> Letter to Chief Draftsperson <input type="checkbox"/> Formal Drawing(s) <input type="checkbox"/> [ ] Sheet(s) of Figure(s) [ ] <input type="checkbox"/> Appeal Communication to Board of Appeals and Interference <input type="checkbox"/> Appeal Communication to Group <input type="checkbox"/> (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Certified Copy or Priority Document(s) <input type="checkbox"/> After Allowance Communication to Group <input checked="" type="checkbox"/> Supplemental Filing to Make Special <input checked="" type="checkbox"/> Copy of PTO-1449 previously submitted <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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REMARKS:

### SIGNATURE OF ATTORNEY OR AGENT

Signature			
Attorney/Reg. No.	Amir H. Raubvogel, Reg. No. 37,070	Dated	October 23, 2002

### CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence, including the enclosures identified above, is being transmitted on the date shown below via facsimile to the Commissioner for Patents at the facsimile number indicated below.			
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Typed or Printed Name	Amir H. Raubvogel	Dated	October 23, 2002
Facsimile Number	1-703-605-0586		

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>0002/PTO(modified)</b> Rev 10/2001 <b>U.S. Department of Commerce</b> Patent and Trademark Office  <div style="text-align: center;"><b>FEE TRANSMITTAL</b></div> <div style="text-align: center;"><b>TOTAL AMOUNT OF PAYMENT</b></div> Subtotal (1) + Subtotal (2) + Subtotal (3) = <b>(\$ 130.00)</b>		<div style="text-align: right;"><b>Complete if Known</b></div> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Application Number</td><td>09/846,823</td></tr> <tr><td>Filing Date</td><td>April 30, 2001</td></tr> <tr><td>First Named Inventor</td><td>Teo E. Dunning</td></tr> <tr><td>Group Art Unit</td><td>2165</td></tr> <tr><td>Examiner Name</td><td>Yahdeja Rega</td></tr> <tr><td>Attorney Docket Number</td><td>22227-04647</td></tr> </table>		Application Number	09/846,823	Filing Date	April 30, 2001	First Named Inventor	Teo E. Dunning	Group Art Unit	2165	Examiner Name	Yahdeja Rega	Attorney Docket Number	22227-04647																																																																																				
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<b>METHOD OF PAYMENT</b> 1. The Commissioner is hereby authorized to: <input checked="" type="checkbox"/> Charge the indicated fees to the below mentioned deposit account. <input checked="" type="checkbox"/> Charge any additional fee required under 37 CFR 1.18 - 1.21 or credit any over payments to the below mentioned deposit account. <input type="checkbox"/> Applicant claims small entity status See 37 CFR 1.27  Deposit Account Number: 19-2555 Deposit Account Name: FENWICK & WEST LLP A Duplicate Copy of this authorization is attached  2. <input type="checkbox"/> Payment Enclosed: <input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Other		<b>FEE CALCULATION (continued)</b> <b>3. ADDITIONAL FEES</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code/Fee</th> <th>Small Entity Fee Code/Fee</th> <th>Fee Description</th> <th>Fee Due</th> </tr> </thead> <tbody> <tr><td>1051/\$130</td><td>2051/\$65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>1052/\$50</td><td>2052/\$25</td><td>Surcharge-late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>1812/\$2,520</td><td>1812/\$2,520</td><td>Fee filing a request for reexamination</td><td></td></tr> <tr><td>1251/\$110</td><td>2251/\$55</td><td>Extension for response within first month<sup>1</sup></td><td></td></tr> <tr><td>1252/\$400</td><td>2252/\$200</td><td>Extension for response within second month<sup>1</sup></td><td></td></tr> <tr><td>1253/\$920</td><td>2253/\$460</td><td>Extension for response within third month<sup>1</sup></td><td></td></tr> <tr><td>1254/\$1,440</td><td>2254/\$720</td><td>Extension for response within fourth month<sup>1</sup></td><td></td></tr> <tr><td>1255/\$1,960</td><td>2255/\$980</td><td>Extension for response within fifth month<sup>1</sup></td><td></td></tr> <tr><td>1401/\$320</td><td>2401/\$160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>1453/\$1,280</td><td>2453/\$640</td><td>Petition to revive unintentionally abandoned application</td><td></td></tr> <tr><td>1501/\$1,280</td><td>2501/\$640</td><td>Utility Issue Fee (Or Reissue)</td><td></td></tr> <tr><td>1502/\$460</td><td>2502/\$230</td><td>Design Issue Fee</td><td></td></tr> <tr><td>1460/\$130</td><td>1460/\$130</td><td>Petitions to the Commissioner</td><td>130</td></tr> <tr><td>1806/\$180</td><td>1806/\$180</td><td>Submission of Information Disclosure Statement</td><td></td></tr> <tr><td>1801/\$740</td><td>2801/\$370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>8021/\$40</td><td>8021/\$40</td><td>Recording each patent assignment per property (on as number of properties)</td><td></td></tr> <tr><td>1809/\$740</td><td>2809/\$370</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>1810/\$740</td><td>2810/\$370</td><td>Fee each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td colspan="3">Other fee (specify):</td><td></td></tr> <tr><td colspan="3">Other fee (specify):</td><td></td></tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (3)</b></td> <td><b>(\$ 130.00)</b></td> </tr> </tbody> </table>		Large Entity Fee Code/Fee	Small Entity Fee Code/Fee	Fee Description	Fee Due	1051/\$130	2051/\$65	Surcharge - late filing fee or oath		1052/\$50	2052/\$25	Surcharge-late provisional filing fee or cover sheet		1812/\$2,520	1812/\$2,520	Fee filing a request for reexamination		1251/\$110	2251/\$55	Extension for response within first month <sup>1</sup>		1252/\$400	2252/\$200	Extension for response within second month <sup>1</sup>		1253/\$920	2253/\$460	Extension for response within third month <sup>1</sup>		1254/\$1,440	2254/\$720	Extension for response within fourth month <sup>1</sup>		1255/\$1,960	2255/\$980	Extension for response within fifth month <sup>1</sup>		1401/\$320	2401/\$160	Notice of Appeal		1453/\$1,280	2453/\$640	Petition to revive unintentionally abandoned application		1501/\$1,280	2501/\$640	Utility Issue Fee (Or Reissue)		1502/\$460	2502/\$230	Design Issue Fee		1460/\$130	1460/\$130	Petitions to the Commissioner	130	1806/\$180	1806/\$180	Submission of Information Disclosure Statement		1801/\$740	2801/\$370	Request for Continued Examination (RCE)		8021/\$40	8021/\$40	Recording each patent assignment per property (on as number of properties)		1809/\$740	2809/\$370	Filing a submission after final rejection (37 CFR 1.129(a))		1810/\$740	2810/\$370	Fee each additional invention to be examined (37 CFR 1.129(b))		Other fee (specify):				Other fee (specify):				<b>SUBTOTAL (3)</b>			<b>(\$ 130.00)</b>								
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<b>SUBMITTED BY</b> Typed or Printed Name: Amir M. Raubvogel Signature: 		<b>Complete (if applicable)</b> Reg. Number: 37,070 Date: October 23, 2002																																																																																																	

<sup>1</sup> Request for Extension of Time per 37 CFR 1.136 (a)(5) must be timely
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PATENT  
*Patricia Lewis*  
#9  
11-7.02

APPLICANTS: Ted E. Dunning and Bradley D. Kindig

APPLICATION NO.: 09/846,823

FILING DATE: April 30, 2001

TITLE: Relationship Discovery Engine

EXAMINER: Not yet known

GROUP ART UNIT: 2165

ATTY. DKT. NO.: 22227-04647

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CERTIFICATE OF FACSIMILE TRANSMISSION

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Dated: October 23, 2002

By: 

Amir H. Raubvogel, Reg. No. 37,070

COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SUPPLEMENTAL  
PETITION TO MAKE SPECIAL

SIR:

In response to the Decision on Petition to Make Special, which was mailed on October 8, 2002, Applicants are hereby filing a Supplemental Petition to Make Special to correct the deficiency of the Petition Fee. Enclosed herewith is a fee transmittal, in duplicate, which authorizes the U.S. Patent and Trademark Office to charge the required fees for the Petition to Make Special to our deposit account 19-2555.

Applicants hereby petition to make the above-referenced application special as described in MPEP §708.02 VIII. No examination has yet been taken by an Examiner in this case. The claims are directed to a single invention. If the Office determines that all the claims presented

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are not obviously directed to a single invention, Applicants will make an election without traverse as a prerequisite to the grant of special status.

A pre-examination search has been made with respect to the present invention by the professional searching company MetroPatent. The following classes and subclasses were searched: Class 709, subclass 231. Additional search of EAST was conducted by Applicants' representatives.

Pursuant to the provisions of 37 CFR 1.56 and 1.97-98, enclosed herewith is a modified form PTO-1449 listing references for consideration by the Examiner. A copy of each of those references not already of record and deemed most closely related to the subject matter encompassed by the claims was sent with the original Petition to Make Special. The inclusion of these references shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

**Detailed Discussion of the References**

Pursuant to the provisions of MPEP §708.02 VIII, the following is a detailed discussion of the references listed in the accompanied modified form PTO-1449, which discussion points out, with the particularity required by 37 CFR 1.111(b) and (c), how the claimed subject matter is patentable over the references.

Independent claim 1 recites:

1. A computer-implemented method of discovering relationships between items, comprising:

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accepting item selections from a plurality of users;  
generating a log for each user, each log containing identifiers for the user's item selections;  
accepting a query including at least one query item identifier;  
scoring the user logs, responsive to a degree of occurrence of the at least one query item identifier in the user logs, to generate user log scores; and  
determining at least one result item, responsive to a degree of occurrence in at least a subset of the scored user logs.

Independent claim 34 recites:

34. A computer-implemented method of discovering a relationship between a first item and a second item, comprising:  
determining a total number of item groups  $N$ ;  
determining a number of item groups  $N_1$  in a subset of item groups, the subset of item groups being defined as including those item groups that contain a second item;  
determining a number of item groups  $N_2$  not in the subset of item groups;  
determining a number of item groups  $k_{11}$  in the subset that contain the first item;  
determining a number of item groups  $k_{12}$  not in the subset that contain the first item;  
determining a number of item groups  $k_{21} = N_1 - k_{11}$  in the subset that do not contain the first item;  
determining a number of item groups  $k_{22} = N_2 - k_{12}$  not in the subset that do not contain the first item;  
and determining a log likelihood ratio.

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Independent claim 39 recites:

39. A system for discovering relationships among items comprising:

- a user interface for accepting item selections from a plurality of users;
- at least one log database, coupled to the user interface, for storing a log for each user,
  - each log containing identifiers for the user's item selections;
- a query input device for accepting a query including at least one query item identifier;
- and
- a recommendation engine, coupled to the log database and to the query input device,
  - for scoring the user logs, responsive to a degree of occurrence, to generate user log scores, and for determining at least one result item, responsive to a degree of occurrence in at least a subset of the scored user logs.

Independent claim 59 recites:

59. A computer-readable medium comprising computer readable code for discovering relationships between items, comprising:

- computer-readable code adapted to accept item selections from a plurality of users;
- computer-readable code adapted to generate a log for each user, each log containing
  - identifiers for the user's item selections;
- computer-readable code adapted to accept a query including at least one query item identifier;

**PATENT**

computer-readable code adapted to score the user logs, responsive to a degree of occurrence of the at least one query item identifier in the user logs, to generate user log scores; and

computer-readable code adapted to determine at least one result item, responsive to a degree of occurrence in at least a subset of the scored user logs.

Independent claim 93 recites:

93. A computer-readable medium comprising computer-readable code for discovering a relationship between a first item and a second item, comprising:

- computer-readable code adapted to determine a total number of item groups  $N$ ;
- computer-readable code adapted to determine a number of item groups  $N_1$  in a subset of item groups, the subset of item groups being defined as including those item groups that contain a second item;
- computer-readable code adapted to determine a number of item groups  $N_2$  not in the subset of item groups;
- computer-readable code adapted to determine a number of item groups  $k_{11}$  in the subset that contain the first item;
- computer-readable code adapted to determine a number of item groups  $k_{12}$  not in the subset that contain the first item;
- computer-readable code adapted to determine a number of item groups  $k_{21} = N_1 - k_{11}$  in the subset that do not contain the first item
- computer-readable code adapted to determine a number of item groups  $k_{22} = N_2 - k_{12}$  not in the subset that do not contain the first item; and
- computer-readable code adapted to determine a log likelihood ratio.

## PATENT

The present invention provides a recommendation engine and application capable of discovering relationships among items and recommending items without requiring undue effort on the part of the user. The recommendations provided by the present invention are based on user profiles that take into account actual preferences of users, without requiring users to complete questionnaires. The present invention provides improved data analysis by avoiding inaccurate assumptions regarding distribution of user preferences. In particular, the present invention employs a binomial log likelihood ratio to provide improved analysis of data points describing user preferences. The invention thus provides improved recommendation generation, while avoiding the problems of overstatement of coincidences and dominance of bestsellers.

The claims are directed toward several different variations of these recommendation engine techniques. Claim 1 recites a method for discovering relationships by accepting item selections from a plurality of users, generating a log for each user, accepting a query including at least one query item identifier, scoring the user logs responsive to a degree of occurrence of the at least one query identifier in the user logs, to generate user scores. Claim 34 recites a method claim for discovering a relationship between a first and second item by determining a total number of item groups  $N$ , determining a number of item groups  $N_1$  in a subset of item groups, determining a number of item groups  $N_2$  not in the subset of item groups, determining a number of item groups  $k_{11}$  in the subset that contain the first item, determining a number of item groups  $k_{12}$  not in the subset that contain the first item, determining a number of item groups  $k_{21} = N_1 - k_{11}$ , determining a number of item groups  $k_{22} = N_2 - k_{12}$ , and determining a log likelihood ratio. Claim 39 recites a system for discovering relationships using a user interface for accepting item selections from a plurality of users, at least one log database, a query input device for accepting a query including at least one query item identifier, and a recommendation engine for scoring the



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user logs. Claim 59 recites a computer program product corresponding to the method of claim 1.

Claim 93 recites a computer program product corresponding to the method of claim 34.

U.S. Patent No. 6,065,058 to Hailpern et al., "Dynamic Push Filtering Based on Information Exchanged Among Nodes in A Proxy Hierarchy"

Hailpern et al. is understood to disclose a method and system for filtering push information in a client-server hierarchy based on actual usage information. A pushed object is communicated down the hierarchy by communicating usage information up the hierarchy and filtering the pushed object based on the communicated usage information. Usage information can include actual object reference/access patterns.

However, Hailpern et al. does not teach the invention of claims 1, 34, 39, 59, or 93 and in particular does not teach any technique for accepting a query. Rather, Hailpern et al. uses filtering to push an object to a user, and in fact solves a completely different problem than that addressed by the present invention. Hailpern et al. seeks to reduce network traffic caused by increased popularity of the world wide web. Specifically, Hailpern et al. teaches a push based filtering approach intended to avoid delays caused by increased traffic when a user requests a document. Hailpern et al. pushes objects through a client-server hierarchy without a request by the user. Thus, Hailpern et al. fails to disclose any technique for accepting a query as claimed herein, and in fact teaches away from accepting a query since push technology generally involve

Furthermore, with respect to claims 34 and 93, Hailpern et al. does not teach any technique for using a log likelihood ratio. Rather, Hailpern et al. merely discloses the use of a usage label to convey preference information. The preference information in the usage label consists of a usage category and a preference category. The usage category is a simple count of the number of times an object is referenced by a user. The preference category conveys user-

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identified preferences. In neither case does Hailpern et al. use a log likelihood ratio as recited in claims 34 and 93.

U.S. Patent Application Publication No. US 2002/0013852 A1 to Janik, "System for providing Content Management, and Interactivity For Thin Client Devices"

Janik is understood to disclose a system for delivering content, data, and application services to a variety of thin client devices. The system is used to provide a means for end users to program preference-based content for delivery at various client services, and then to automatically or under the control of the user, send the content to client devices for presentation to the end user.

However, Janik does not teach the invention of claims 1, 34, 39, 59, or 93 and in particular does not teach any technique for scoring user logs, responsive to a degree of occurrence of at least one query item identifier in user logs. Rather, Janik provides the user with the ability to group audio files into user defined playlists. Since the playlist is user defined, it teaches away from a relationship discovery engine claimed in the present invention. In particular, in the system disclosed in Janik, the user identifies content to be delivered. Janik does not disclose scoring user logs, responsive to a degree of occurrence of at least one query item identifier in user logs as claimed herein. Furthermore, Janik fails to disclose a technique for determining at least one result item as claimed herein. Janik merely permits the user to group audio files and consequently has no need to score user logs to discover relationships or to determine a result item. In contrast, the present invention recommendation engine makes a recommendation by determining at least one result item responsive to a degree of occurrence in at least a subset of the scored user logs.

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Furthermore, with respect to claims 34 and 93, Janik does not teach any technique for using a log likelihood ratio. Janik does not teach any sort of scoring or use of a log likelihood ratio since the playlists in Janik are user defined.

U.S. Patent Application Publication No. US 2001/0044855 A1 to Vermeire et al., "System for Accessing Content"

Vermeire et al. is understood to disclose a system for accessing content from the Internet and other computer networks using a database, a content provider interface, and a viewer interface. The database maps channel codes to network addresses as well as to content descriptions. The content provider assists content providers in entering network addresses and content descriptions for their information and entertainment content into the database. The viewer guide displays the content descriptions and a network browser allows a user to view the content of a channel. Additionally, the network browser creates a Favorite Channel system including a submenu for each genre and assigns each channel that user designates as a favorite to that genre submenu.

However, Vermeire et al. does not teach the invention of claims 1, 34, 39, 59, or 93 and in particular does not teach any technique for scoring user logs, responsive to a degree of occurrence of at least one item identifier in the user logs. Even though Vermeire et al. teaches the use of a Favorite Channel system, the channels in the Favorite Channel system are assigned by the user. The user must identify a favorite channel for the browser to include in the Favorite Channel system. Since such channels are user identified, Vermeire system teaches away from a relationship discovery engine as claimed herein. The present invention recommendation engine scores user logs, responsive to a degree of occurrence of at least one item identifier in the user logs. Thus, the present invention implements a scoring process without requiring the user to assign a score or a favorite.

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Furthermore, Vermeire et al. fails to disclose any technique for determining at least one result item. Vermeire et al. discloses merely having a user identify a favorite. In contrast, the present invention recommendation engine determines at least one result item and is therefore not reliant on a user identifying favorites.

Furthermore, with respect to claims 34 and 93, Vermeire et al. does not teach any technique for using a log likelihood ratio. Vermeire et al. does not teach any sort of scoring or use of a log likelihood ratio since the system in Vermeire et al. is user defined.

U.S. Patent Application Publication No. US 2001/0042107 A1 to Palm, "Networked Audio Player Transport Protocol and Architecture"

Palm is understood to disclose a system for communications using a networked multimedia device and a media server. A user may navigate and select a particular media item to be played. The user, also, can indicate user preferences such as a hierarchical list, searches and content provider suggestions.

However, Palm does not teach the invention of claims 1, 34, 39, 59, or 93 and in particular does not disclose any technique for scoring user logs. In Palm's system a user may indicate preferences, but there is no scoring user logs. Palm merely permits a user to identify and select a playlist. Palm does not disclose any technique for scoring user logs because the system in Palm is user defined.

Furthermore, Palm fails to disclose a technique for determining at least one result item, responsive to a degree of occurrence in at least one subset of the scored user logs. The system disclosed in Palm permits an interactive search for specific titles using key words. It will be appreciated that an interactive search is not determining a result item responsive to a degree of occurrence in at least a subset of user logs. Additionally, Palm discloses permitting a user to select and identify a song or playlist. Each selection in the Palm system is a selection made by

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the user. Thus, the system disclosed in Palm teaches away from the present invention because in the Palm system selections are user defined. In particular, there is no teaching in Palm of scoring user logs or determining result items based on the scored logs as claimed herein.

Furthermore, with respect to claims 34 and 93, Palm does not teach any technique for using a log likelihood ratio. Palm does not teach any sort of scoring or use of a log likelihood ratio since the system in Palm is user defined.

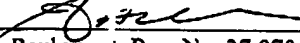
**Other Claims**

Since the cited references do not disclose the claimed features discussed above, claims 1, 34, 39, 59, and 93 are patentably distinguishable over the references. The remaining claims in the present application each incorporate the limitations of claim 1, 34, 39, 59, or 93, and include additional features and limitations. Therefore, all claims herein are patentably distinguishable over the cited references for at least the reasons discussed above.

Consideration of the cited references and other information and grant of special status by this petition is solicited.

Respectfully submitted,  
Ted E. Dunning and Bradley D. Kindig

Dated: October 23, 2002

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Sheet 1 of 1

FORM PTO-1449 (REV. 6-89)		U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		Attorney's Doct. No. <b>22227-04647</b>		Serial No. <b>09/846,823</b>	
<b>INFORMATION DISCLOSURE CITATION</b>				Applicant <b>Te.J. E. Dunning &amp; Bradley D. Kindig</b>			
(Use several sheets if necessary)				Filing Date <b>April 30, 2001</b>		Group Art Unit <b>2165</b>	
<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate	
YR	A	US 6,317,761 B1	11/13/01	Landsman et al	707	513	07/13/99
	B	US 6,249,810 B1	06/19/01	Kiraly	709	217	04/27/99
	C	6,161,132	12/12/00	Roberts et al.	709	219	
	D	6,154,773	11/28/00	Roberts et al.	709	219	
	E	6,065,058	05/16/00	Hailpern et al.	709	231	
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		Patent Application Publication Number	Publication Date	Applicant	Filing Date	Application No.	
YR	F	US 2002/0016839 A1	02/07/02	Smith et al.	05/31/01	09/871,176	
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	O	US 2001/0042109 A1	11/15/01	Bolas et al.	06/16/99	09/334,846	
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document Number	Date	Country	Class	Subclass	Translation Yes No
YR	P	JP2001202368	07/27/01	Japan			No
EXAMINER <u>Vernalega, D. Della</u> DATE CONSIDERED <u>1/10/04</u>							
EXAMINER: Initial & references considered. Whether or not citation is in conformance with MPEP § 609; Draw h.e. through citation if not in conformance and not considered Include copy of this form with next communication to applicant							

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**DATE:** October 23, 2002**ACCOUNT #:** 22227-04647**FROM:** Amir H. Raubvogel, Esq.

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OCT 28 2002

**GROUP 3600****MESSAGE:**

**Re:** Applicants: Ted E. Dunning and Bradley D. Kindig  
**Serial No.:** 09/846,823  
**Filing Date:** April 30, 2001  
**Title:** RELATIONSHIP DISCOVERY ENGINE  
**Examiner:** Yahdeja Retta  
**Group Art Unit:** 2165  
**Atty. Dkt. No.:** 22227-04647

Pursuant to your instructions, attached is a Supplemental Petition to Make Special including a Transmittal form and Fee Transmittal form. Please expedite processing of this petition. If you need anything further, please call me at (650) 858-7276.

Sincerely,   
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